

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) Method for grinding a rotationally symmetrical machine part ~~[[5]]~~ provided with a longitudinal bore ~~[[20]]~~, the one end-face surface of which is embodied as an active surface ~~[[24]]~~ in the form of a flat truncated cone with a cross-section with a straight contour, characterized in that first said active surface ~~[[24]]~~ on said machine part ~~[[5]]~~ held on one side at its exterior circumference is ground, the rotating circumferential surface of the first cylindrical grinding wheel ~~[[14]]~~ being positioned perpendicularly against said active surface ~~[[24]]~~, said machine part ~~[[5]]~~ being displaced in the direction of its rotational and longitudinal axis ~~[[17]]~~ relative to said first grinding wheel ~~[[14]]~~, whereby the axial extension ~~[[28]]~~ of said first grinding wheel ~~[[14]]~~ covers the radial angled extension of said active surface ~~[[24]]~~, and in that then in the same clamping the interior wall of said longitudinal bore ~~[[20]]~~ is ground, a second grinding wheel ~~[[16]]~~ of smaller diameter being introduced into said longitudinal bore ~~[[20]]~~ of said machine part ~~[[5]]~~ by pivoting a grinding headstock ~~[[10]]~~, which carries at least said first ~~[[14]]~~ and said second ~~[[16]]~~ grinding wheel, and placed radially against said interior wall.

2. (Currently Amended) Method in accordance with claim 1,
~~characterized in that~~ wherein said interior wall of said longitudinal bore ~~[(20)]~~ is
ground using longitudinal grinding.

3. (Currently Amended) Method in accordance with claim 2,
~~characterized in that~~ wherein said interior wall of said longitudinal bore ~~[(20)]~~ is
ground using peel-grinding.

4. (Currently Amended) Method in accordance with claim 1,
~~characterized in that~~ wherein said interior wall of said longitudinal bore ~~[(20)]~~ is
ground using infeed grinding.

5. (Currently Amended) Method in accordance with claim 1, wherein any
~~of the preceding claims, characterized in that~~ individual axial segments (21, 22,
23) of said interior wall of said longitudinal bore ~~[(20)]~~ are ground.

6. (Currently Amended) Method in accordance with claim 1, wherein any
~~of the preceding claims, characterized in that~~ at least three grinding wheels are
brought into their working position by pivoting three grinding spindles that carry
said grinding wheels.

7. (Currently Amended) Apparatus for grinding a rotationally symmetrical machine part $[(5)]$ provided with a longitudinal bore $[(20)]$, the one end-face surface of which is embodied as an active surface $[(24)]$ in the form of a flat truncated cone with a cross-section with a straight contour, ~~in particular for performing the method in accordance with any of claims 1 through 6 comprising,~~

~~—~~ with a clamping device for one-sided clamping of said machine part $[(5)]$ at its exterior circumference and for rotationally driving it,

~~—~~ with a grinding spindle slide $[(9)]$ that can be moved in a direction running transverse to the rotational and longitudinal axis $[(17)]$ of said machine part $[(5)]$,

~~—~~ with a device for longitudinal displacement of said machine part $[(5)]$ in the direction of its rotational and longitudinal axis $[(17)]$,

~~—~~ with a grinding headstock $[(10)]$ that is attached to said grinding spindle slide $[(9)]$ via a pivot axis $[(11)]$ running perpendicular to the displacement plane ~~thereof~~ of said grinding spindle slide and

that carries at least two grinding spindles (12,13) that can be pivoted into the working position,

— with a first cylindrical grinding wheel [(14)], arranged on said first grinding spindle [(12)] and driven thereby, that is for vertical grinding of said active surface [(24)] situated on said machine part [(5)] and that has an axial extension [(28)] that is larger than the radial angled extension of said active surface [(24)], and

— and with a second cylindrical grinding wheel [(16)], arranged on said second grinding spindle [(13)] and driven thereby, that has a smaller diameter than said first grinding wheel [(14)] and that is for interior cylindrical grinding of the longitudinal bore [(20)] of said machine part [(5)],

[-] whereby depending on the pivot position of said grinding headstock [(10)] either the rotating circumferential surface of said first grinding wheel [(14)] is placed on said active surface [(24)] of said machine part [(5)] to be ground or the axis of said second grinding wheel [(16)] runs spaced from and parallel to said rotational and longitudinal axis [(6)] of said machine part

[[5]]].

8. (Currently Amended) Apparatus in accordance with claim 7, ~~characterized in that~~ wherein in the arrangement of two grinding spindles ~~(12, 13)~~ on said grinding headstock [[10]] their axes run parallel to one another and said two grinding wheels ~~(14, 16)~~ are attached on the same side of said grinding headstock [[10]].

9. (Currently Amended) Apparatus in accordance with claim 8, ~~characterized in that~~ wherein three grinding spindles, each with a grinding wheel, are attached to said grinding headstock at angle intervals of 120 degrees each.

10. (Currently Amended) Apparatus in accordance with claim 7, wherein ~~any of claims 7 through 9, characterized in that~~ said clamping device is a chuck [[3]] with centrally adjustable clamping jaws [[4]].

11. (Currently Amended) Apparatus in accordance with claim 7, wherein ~~any of claims 7 through 10, characterized in that~~ said clamping device is located on a grinding table [[7]] that can be moved in said rotational and longitudinal axis [[17]] of said machine part [[5]] relative to said grinding spindle slide [[9]].